

JUNE/FY06

**BLOSSOM POINT
RESEARCH FACILITY
Maryland**

**Army Defense Environmental
Restoration Program
Installation Action Plan**

Table of Contents

Table of Contents	1
Statement of Purpose	2
Acronyms	3
 Installation Information	4
Cleanup Program Summary	5
 Military Munitions Response Program (MMRP)	6
Summary	7
Contamination Assessment	8
MMRP Active Sites	10
<i>BPF-001-R-01, Mortar Range Fan</i>	11
<i>BPF-002-R-01, Shoreline Range Fan</i>	12
<i>BPF-003-R-01, Water Range Fan</i>	13
 MMRP Schedule	14
MMRP Costs	15
 Community Involvement	16

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Military Munitions Response Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the U.S. Army Environmental Center (USAEC), Blossom Point Research Facility (BPRF), Installation Management Agency (IMA)-Northeast Region, executing agencies, Maryland Department of the Environment, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan:

Blossom Point Research Facility (BPRF)

Engineering & Environment, Inc (EEI) for USAEC

Acronyms & Abbreviations

AEDB-R	Army Environmental Database – Restoration
ALC	Adelphi Laboratory Center
BPRF	Blossom Point Research Facility
CERCLA	Comprehensive Environmental Response Compensation and Liability Act (1980)
DA	Department of Army
DERA	Defense Environmental Restoration Account (now called ER,A)
DD	Decision Document
DMM	Discarded Military Munitions
DOD	Department of Defense
EPA	U.S. Environmental Protection Agency
ER,A	Environmental Restoration, Army (formerly called DERA)
FS	Feasibility Study
FY	Fiscal Year, Federal Government (1 September to 31 October)
IAP	Installation Action Plan
IMA	Installation Management Agency
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LTM	Long-Term Management
MDE	Maryland Department of the Environment
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
NPL	National Priorities List
PA	Preliminary Assessment
RA	Remedial Action
RAC	Risk Assessment Code
RA(C)	Remedial Action (Construction)
RAB	Restoration Advisory Board
RC	Response Complete
RD	Remedial Design
REM	Removal
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
TRC	Technical Review Committee
TAPP	Technical Assistance for Public Participation
TRC	Technical Review Committee
USAEC	United States Army Environmental Center (formerly called USATHMA)
UXO	Unexploded Ordnance

Installation Locale The Blossom Point Research Facility (BPRF) is a 1,600-acre facility located on Cedar Neck Point, at the confluence of Nanjemoy Creek and the Potomac River, in the southern tip of Charles County, MD. It is approximately 50 miles south of Washington D.C. and 9 miles southwest of LaPlata, MD. Access to this facility from US 301 is via MD Route 6 and Blossom Point Road.

Installation Mission:

Operate and maintain an ordnance and electronics research facility at Blossom Point, Maryland as a sub-installation to the U.S. Army Garrison Adelphi Laboratory Center (GALC). Support the Acoustic/Electro—Optic Propagation Research Site (AEOPRS) operated by the US Army Research Laboratory (ARL). Provide reimbursable, customer supported explosives range facility operations for ARL and other Department of Defense and Federal Agencies.

Lead Organization:

Installation Management Agency- Northeast Region

Lead Executing Agencies:

Corps of Engineers, Baltimore District

Regulatory Participation

Federal: U.S. Environmental Protection Agency (EPA)

State: Maryland Department of the Environment (MDE)

National Priorities List (NPL) Status: Not on NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status:

No RAB exists at Blossom Point Research Facility

Installation Program Summary:

MMRP

Primary Contaminants of Concern: Unexploded Ordnance (UXO), Discarded Military Munitions (DMM), Munitions and Explosives of Concern (MEC)

Affected Media of Concern: Soil, Sediment, Surface Water

Estimated date for RIP/RC: 2017

Funding to Date (through FY05): \$298,868

Current year funding (FY06): \$29,000

Cost-to-Complete (FY07+): \$42,312,000

Cleanup Program Summary

Historic Activity:

Preliminary Assessment (PA) was completed December 2003 and a total of 3 Military Munitions Range Program (MMRP) sites were identified. Site Inspection (SI) will be completed in FY06. Additional work will be determined after SI is completed.

MMRP

Progress to Date: PA completed at all sites

Future Plan of Action: complete all SI's by the end of CY2006. SI's are underway but not yet complete.

Blossom Point Research Facility

Military Munitions Response Program

MMRP Summary

Total AEDB-R MMRP Sites / AEDB-R sites with Response Complete: 3/0

AEDB-R Site Types: 3 Multi-use Ranges

Most Widespread Contaminants of Concern: UXO's, DMM, MEC

Media of Concern: Soil, Sediments

Completed REM/IRA/RA: None

Total MMRP Funding:

Prior Years (through FY05):	\$298,868
Current Year (FY06):	\$29,000
Future Requirements (FY07+):	<u>\$42,312,000</u>
Total:	\$42,639,868

Duration of MMRP:

Year of MMRP Inception: 2003

Year of MMRP RIP/RC: 201709/201709

Year of MMRP Completion Including LTM: 2047

MMRP Contamination Assessment

MMRP Contamination Assessment Overview

The Phase 3 Army Range Inventory was completed at Blossom Point in Dec 03. The inventory identified three multi-use sites as eligible for the MMRP, the Mortar Range Fan, the Shoreline Range Fan, and the Water Range Fan. The Phase 3 Inventory serves as the Preliminary Assessment under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). A Site Inspection is scheduled in FY06.

MMRP Cleanup Exit Strategy

The installation plans to complete all SIs by 2006 and execute follow on phases/actions as required in the individual site cleanup strategies.

2003

- Closed, Transferring, and Transferred Range/Site Inventory Report II, Adelphi Laboratory Center (ALC) and ALC Blossom Point Test Area, Maryland, December

Blossom Point Research Facility

Military Munitions Response
Program
Site Descriptions

BPF-001-R-01

Mortar Range Fan

SITE DESCRIPTION

This 234-acre land portion of two range fans is located northwest of the Blossom Point Test Area. The ranges were used for experimental testing of 81 mm mortars from 1942 to 1982. The munitions used inside these range fans were 81mm mortars. Two Army Environmental Database – Restoration (AEDB-R) sites may be associated with this site - Range 2 (Water Range), BPF-004, and Range 4 (Water Range), BPF-006; however, the Phase 3 inventory team was unable to verify which site or sites correspond to the sites identified in this inventory report. The area is owned by private individuals. No evidence was found to indicate a UXO survey or remediation had been performed over the area. The area is used for recreational purposes.

CLEANUP STRATEGY

A site investigation will be completed that includes a limited soil sampling investigation to determine if further action is necessary. If necessary, this will be followed by an extensive soil sampling investigation to further characterize the extent of the soil contamination and possibly groundwater. If necessary, a remedial action may follow that will address any existing contamination.

The SI phase will not include any soil sampling at this site.

STATUS

REGULATORY: CERCLA

RAC Score: 1

CONTAMINANTS OF CONCERN:
UXO, DMM, MEC

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200306	200312
SI	200510	200706
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709
LTM	201709	204709

RC: 201709

BPF-002-R-01

Shoreline Range Fan

SITE DESCRIPTION

This 17-acre transferred range fan is located along the shoreline of the Blossom Point Test Area. This area is composed of a 30-foot perimeter on the shoreline outside of the operational range area, where munitions have been observed on the shore and in the shallow water. The individual range fans that are combined in the Water Range Fans would have overlapped this area, but the Shoreline Range Fan was separated because of common physical features of the beachfront area.

The munitions fired into the range fan were 2.75", 3.25", 4.5", and 5" rockets; 4.2" and 81 mm mortars; and 20, 30, and 40 mm projectiles. All of the firing points for these ranges are located within the current operational area of Blossom Point Research Facility. Munitions have been seen on the surface of the shoreline.

STATUS

REGULATORY: CERCLA

RAC Score: 1

CONTAMINANTS OF CONCERN:
UXO, DMM, MEC

MEDIA OF CONCERN:
Soil, Sediment

Phases	Start	End
PA	200306	200312
SI	200510	200706
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC: 201709

Three AEDB-R sites may be associated with this site - Range 2 (Water Range), BPF-004, Range 4 (Water Range), BPF-006, and the Shoreline Stabilization Area, BPF-022; however, the Phase 3 inventory team was unable to verify which site or sites correspond to the sites identified in this inventory report. No evidence was found to indicate a UXO survey or remediation had been performed over the area. The area is currently not used by Department of Defense (DoD).

CLEANUP STRATEGY

A site investigation will be completed that includes a limited soil and sediment sampling investigation to determine if further action is necessary. If necessary, this will be followed by an extensive soil sampling investigation to further characterize the extent of the soil and sediment contamination. If necessary, a remedial action may follow that will address any existing contamination.

BPF-003-R-01

Water Range Fan

SITE DESCRIPTION

This 4,681-acre transferred range fan surrounds the Blossom Point Test Area and is comprised of 14 overlapping and concurrent range fans. The ranges were used for experimental testing of mortars, rockets, and projectiles between 1942 and 1976. The munitions fired into the range fan were 2.75", 3.25", 4.5", and 5" rockets; 4.2" and 81 mm mortars; and 20, 30, and 40 mm projectiles.

All of the firing points for these ranges are located within the current operational area of Blossom Point Research Facility. Three AEDB-R sites may be associated with this site - Range 2 (Water Range), BPF-004, Range 4 (Water Range), BPF-006, and the Shoreline Stabilization Area, BPF-022; however, the Phase 3 inventory team was unable to verify which site or sites correspond to the sites identified in this inventory report. The area is now open water owned by the State of Maryland. No evidence was found to indicate a UXO survey or remediation had been performed over the area. The area is used for recreational purposes.

STATUS

REGULATORY: CERCLA

RAC Score: 2

CONTAMINANTS OF CONCERN:
UXO, DMM, MEC

MEDIA OF CONCERN: Soil

<u>Phases</u>	<u>Start</u>	<u>End</u>
PA	200306	200312
SI	200510	200706
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC: 201709

CLEANUP STRATEGY

A site investigation will be completed that includes a limited soil sampling investigation to determine if further action is necessary. If necessary, this will be followed by an extensive soil sampling investigation to further characterize the extent of the soil contamination and possibly groundwater. If necessary, a remedial action may follow that will address any existing contamination.

The SI phase will not include any soil sampling at this site.

Initiation of MMRP: 2003

Past Phase Completion Milestones:

- 2003 - PA

Projected ROD/DD Approval Dates: None

Projected Construction Completion: 2017

Schedule for Five Year Reviews: No 5 year reviews are currently scheduled

Estimated Completion Date of MMRP including LTM: 2047

Prior Years Funds:**Total Funding up to FY04: \$0**

Year	Site Information	Expenditures	FY Total
FY05	SI		\$298,868

Total Funding through FY05: \$298,868***Current Year Funds***

Year	Site Information	Expenditures	FY Total
FY 06	SI		\$29,000

Total Funding FY06: \$29,000***Total Future Requirements:* \$42,312,000*****Total Program Cost (from inception for completion of the IRP):* \$42,639,868**

There is no Restoration Advisory Board (RAB), Technical Review Committee (TRC) or Technical Assistance for Public Participation (TAPP) at Blossom Point.